# Managing Diabetes With A Healthy Diet

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#### **Diabetes Overview**

Molly Pettyjohn, MS, RD, LD

#### **Diabetes**

- There are 2 kinds of diabetes:
- Type 1
- Type 2

### **Type 1 Diabetes**

- Sometimes referred to Insulin Dependent Diabetes Mellitus
- Body makes no insulin or very little insulin
- Daily insulin shots are necessary
- Usually found in children or young adults that are thin or normal weight for height
- Once called Juvenile Onset Diabetes

### **Type 2 Diabetes**

- Also known as Non-insulin Dependent Diabetes Mellitus
- No longer called Adult Onset Diabetes
- Body makes insulin but it may not work correctly or there may not be enough made
- More common than Type 1

### Type 2 Diabetes (continued)

- · May require medications
- In some cases, insulin may be needed
- Usually found in older adults who are overweight and have a family history of the disease

# Long-Term Complications of Diabetes

- Amputations/poor wound healing resulting from poor circulation
- Vision problems
- Kidney failure
- Increased risk for high blood pressure, stroke, and heart disease

### **Hemoglobin A1c**

- Glycosylated hemoglobin or A1c
- Tests average blood sugar control over time
- Gives you a picture of control over past 8-12 weeks

# Hemoglobin A1c (continued)

- Lets you know how well your treatment plan is working
- Desired target for A1c is less than 7
- Should be checked at least 2 times a year

# Managing Diabetes With A Healthy Diet

Miriam Gaines, MACT, RD, LD

# Good Meal Planning Is Important Because . . .

#1 - It can affect your blood glucose levels (sugar levels)

- It can result in a healthier way of eating for you and the entire family
- · You may lose weight
- · You may save money on food

### **Guidelines In Meal Planning**

- A balanced meal includes food from every food group
  - Breads/ Starches
  - Vegetables (non-starchy)
  - Fruit
  - Meat
  - Milk

#### 1. Breads/Starches

- Carbohydrates are the body's main source of energy and should be the major part of total daily intake.
- There are two types of carbohydrates:
  - Simple carbohydrates (such as sugar or honey)
  - Complex carbohydrates (such as grains, beans, peas or potatoes)

# **Good Carbohydrates Bad Carbohydrates?**

- "Good" carbs are not processed and contain a fair amount of fiber
- Whole grain bread, oatmeal and whole grain cereals, legumes, veggies, fruits,
- etc.
   Complex



### **Complex Carbs**

- -Complex carbohydrates are preferred because:
- · They are more nutritious
- They have fewer calories per gram compared to fat
- They cause fewer problems with overeating than fat or sugar
- They allow better blood glucose control

# Starchy Vegetables Provide Complex Carbohydrates

- Beans: lima, baked beans, kidney, navy
- Corn
- Peas: field, white acre, English, black eyed, split, lentils, "farm peas"
- · Potato, sweet potato
- · Winter squash, pumpkin

# **Refined Carbohydrates**

- "Bad" carbs are refined or processed
- White bread, white pasta, soda, sugary foods, including ice cream

#### Cut Back on High Carbohydrate Foods That Are Low in Fiber

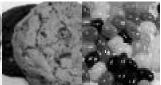




Processed foods that contain little or no fiber are not as filling as their unprocessed counterparts.

# **Stay Away From High-Sugar Foods**





Sugar-rich foods usually have a high calorie density and low satiety value.

### 2. Non-Starchy Vegetables

- Add many vitamins and minerals to the diet
- Add color to your meals with vegetables
- Do not have many calories (25 Kcal per 1/2 cup cooked serving)

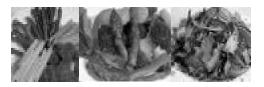
# Which Ones Are Non-Starchy?

Asparagus
Beans-green, wax
Beets
Broccoli
Brussels sprouts
Cabbage
Carrots
Greens

Mushrooms

Okra
Onions
Pea pods
Peppers
Salad greens
Sauerkraut
Spinach
Tomato
Zucchini

Eat More Nutrient Rich Non-Starchy Vegetables



Raw and cooked vegetables Salads

### 3. Fruit

- Fresh, water-packed canned, dried
- · Careful with calories in dried fruits
- Choose more whole fruit than juice products

#### 4. Meat Group

- · Provides protein
- Foods from animals
  - -Milk, cheese
  - -Eggs
  - -Meat
- Plant products
  - -Dried peas and beans
  - -Lentils
  - -Nuts

# Substitute Lean Protein in Place of High-Fat Protein





Include beans in your meals a few times a week. Choose fish, shellfish and white meat poultry without skin in place of fatty red meats and processed meats like sausages and hot dogs.

#### 5. Milk

- · Choose 1% or less fat milk
- · Milk is needed at all ages
- New studies show milk is need for more than strong bones.
- Three servings per day

### **Use Fats & Oils Sparingly**





Refined fats and oils have the highest calorie density and lowest satiety value of all foods. The less the better.

#### **Don't Drink Your Calories**





Research indicates that liquid calories have a low satiety value so they don't fill you up.

# Foods That Affect Blood Sugar . . .

Carbohydrates do the most!









### **Carbohydrates In Your Diet**

- We need carbohydrates as part of a healthy eating plan
- FIRST, REMEMBER THAT....
   One serving of a carbohydrate food =
   15 grams carbohydrate, whether it is a fruit, vegetable, milk or starch

# Which Food Groups Provide Carbohydrates?

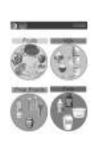
- A serving of fruit = 1 carbohydrate
- A serving of starch = 1 carbohydrate
- A serving of milk = 1 carbohydrate
- A serving of a starchy vegetable = 1 carbohydrate
- Non-starchy vegetables are slightly different
- Three servings of vegetables = 1 carbohydrate
- Do not count unless eating large amounts

# How Many Carbohydrates Are Needed At Each Meal?

- Usually, around 3-4 carbohydrates per meal (or 45-60 grams)
- Some people may need 2-3 carbohydrates between meals as a snack (or 30-45 grams)

## Putting It ALL Together: The Plate Planner





# **Plate Planner Tips**

- Half of the plate is non-starch vegetable
- One-fourth of the plate is meat
- One-fourth of the plate is bread/starch
- · Small fruit to the side
- · Milk serving to the side

# **Before Changing Meals**

• Talk with your doctor

# PHYSICAL ACTIVITY For Health and Fitness

Anita Sanford, RN

#### **Physical Activity = Movement**

- Does not require a gym membership
- Moderate activities:
  - -walking, swimming, raking leaves, biking
- · Vigorous activities:
  - -jogging, racquetball
- Current recommendations: a minimum of 30 minutes of moderate PA daily
- 10 or 15 minute segments acceptable

# Exercise and Diabetes Control

- Exercise usually lowers blood sugar
- Helps the body use its food supply better
- · May help insulin work better
- If overweight, can, with good nutrition, help take off extra pounds
- · Good for heart health
- Should be done regularly and at least several days a week

#### **Benefits of PA For All**

- Reduces the risk of heart disease and high blood pressure
- Reduces blood triglyceride levels
- May reduce risk of certain cancers (colon and breast)
- Helpful in prevention and control of diabetes and osteoporosis
- May enhance weight loss & maintenance
- · Reduces stress and energizes

### **Precautions**

- Consult your health care provider before beginning any program of activity
- If just starting an activity program, start slowly
- Example: raise arms and legs while seated; walk in place during a TV commercial break
- In time, add slow walking, 5 to 10 minutes to start, gradually working up to 30 minutes daily

### TIPS For Healthy Activity

- Warm up before exercise: 5 minutes of slow walking. Include gentle stretching to improve flexibility.
- A cool down period after physical activity gradually brings the heart rate down.
- Moderate use of light weights helps maintain or enhance upper body strength.
- Drink plenty of water before exercise and frequently during and after exercise.

### **Additional Tips**

- If diabetic, monitor blood sugar before and after exercise, and wear comfortable, good fitting walking shoes.
- Cotton-polyester socks keep the feet dry and minimize trauma to the feet.
- Check feet daily for pressure sores, and blisters.

#### Recommendations

- Keep activity safe, simple and enjoyable.
- · Plan activity into your day.
- Make family time activity time get children involved.
  - Walk with the children to and from school.
  - -Visit a park or the zoo together.

#### Recommendations

- Fly a kite, throw a Frisbee, shoot some hoops.
- Share household chores.
- Plant and cultivate a garden.
- Turn off the TV and take a walk.

#### **Leisure Time Activities**

- Stretch while watching a TV program.
- Walk with friends in the neighborhood or park.
- · Take the dog for a longer walk.
- Mow the lawn; rake leaves; wash the car.
- Vacuum, mop, sweep.

#### **Leisure Time Activities**

- Walk around the mall before shopping.
- Park the car farther from the store entrance.
- Turn a coffee break into a walking break.
- · Put on some music and dance!

### **In Summary**

- Have a medical exam before beginning any exercise program.
- Exercise is an important part of good diabetes control.
- Regular, moderate, physical activity is important for a healthy lifestyle for all.
- Physical activity should be safe, simple and FUN!